

Audio Video Solutions



ATI
Amplifier Technologies
**TRANSLATING
TECHNOLOGY**



Performance and Reliability. Without the Window Dressing.

For more than three decades, designer/engineer Morris Kessler has created audio/video products with a simple goal in mind: delivering maximum performance and reliability. In his products, you will find no gratuitous features or needless ornamentation. But everywhere you look, you will find design touches that improve sound quality and increase dependability.

Beginning in the 1960s with SAE—one of the pioneers in high-quality solid-state amplification—and extending into the new millennium with Amplifier Technologies, Inc., Kessler has always relied on proven designs. Most of his original products, some more than three decades old, are still hard at work in consumers' homes. Through the decades, he has refined his circuits to near-perfection. And from the first day, he has operated his own Southern California factory—unlike most audio companies, which subcontract their vital manufacturing processes to anonymous offshore companies.

In the following pages, you'll find solutions to virtually any audio/video situation, from basic stereo or whole-house audio installations to the most robust home theater set-up. We are also recommending combinations of amplifiers and A/V processors that create logical solutions to the sometimes perplexing question "what goes with what in my home theater?" Please keep in mind that these combinations are alterable and, in actuality, any ATI amplifier can be mated with any of ATI's A/V processors to create the most breathtaking "cinema-like" experience possible.



MULTI-CHANNEL PURE BA

AT2

POV



ANCE POWER AMPLIFIER

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WER



STANDBY

ON

PEAK

*AT2000 with
rack mount
option shown
actual size*

An Interview with Morris Kessler,

ATI Founder and Chief Engineer

Is there an overall philosophy in the way you design and build products?

In all the products I've designed—even going back 30 years ago—the focus is on value and performance. ATI products aren't inexpensive, but you always get your money's worth. You're not buying a boxful of air.

What's filling all that space?

Big heat sinks, for one thing—we could save space by using fans, but that creates a lot of noise. Big transformers, and separate power supplies for each channel. We also ground all of our amplifiers at a single, central point, instead of grounding them in the transformer. That improves the grounding and lowers noise, but it means we have to have extra rectifiers in the power supply. As a result, we create a weight issue, too. Heat sinks and big transformers are heavy, so you need an extremely sturdy chassis to support them. We could save some cost by, for example, using cooling fans, but the end product wouldn't be as good as I want it to be.

You seem to take your design cues from Henry Ford—all of your products come in whatever color you want, as long as it's black.

People should get what they pay for. Using a faceplate that costs as much as the rest of the amp costs doesn't make sense to me. An amp's chassis should be sturdy and have a nice design, and that's it.



We assure the quality behind the name

and brought the amp to the 1993 Consumer Electronics Show to see if we could drum up any interest. I ended up getting requests to build amps for other companies, and we've since built amps for at least a half-dozen companies whose names you would definitely recognize. In between those jobs, we started building ATI amps. The first ATI amps were very successful, and we've expanded the line greatly from there.

How do you assure that all of your products achieve the quality standards you set?

Well, we manufacture or assemble everything right here in our own factory. I do have an office in the factory, but my real office is out on the production line. I spend a lot of time there making sure everything's running right.

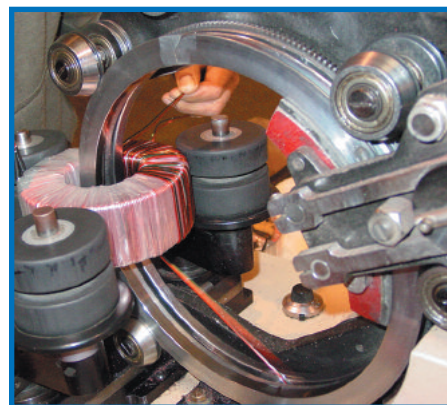
How has ATI evolved over the years?

I've been manufacturing amplifiers for decades. Around '93, I got interested in computer-aided design [CAD], and built a stereo amp just for fun. I got the bug again,

ATI Manufacturing:

No Shortcuts, No Compromises

We assemble all ATI products in our 50,000-square-foot Southern California factory. Everything is built 100 percent to our specifications, and we monitor every aspect of the quality-control process ourselves. Here are some of the steps we take to make ATI products the best value in the audio industry. All of these improvements pay off in dependability and sound quality.



Bifilar transformer winding process

transformers that work more efficiently and produce less distortion. Our techniques and materials combine to create the highest quality power transformers in existence.

Each amplifier channel gets not only its own set of transformer windings, but its own rectifier and storage capacitors, thus giving each channel its own separate power supply. Even if the left channel is pushed to the limit by, say, a loud car crash on a movie soundtrack, it does not affect the power that the other channels receive.

Enclosures

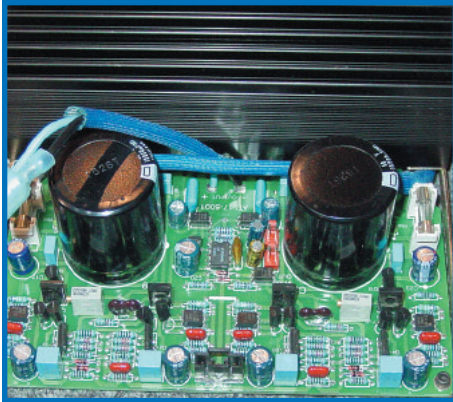
We house our products in rugged chassis, with powder-coated finishes that resist scratches and prevent corrosion. Our hardware is equally durable and rustproof, made from Teflon-coated, 18-8 stainless steel. We use inserts instead of threading metal parts, resulting in a stronger unitized chassis.

Toroidal Transformers

An amplifier starts with the power supply, which starts with the transformer—the source of an amplifier's power. We wind all of our own transformers in our own shop, to assure the highest quality. The transformer cores in our amplifiers are made from MOH, with magnetic properties that make the cores 18 percent more efficient than standard transformer cores. Each amplifier channel gets its own set of windings, which minimizes interaction between channels. We wind the cores two wires at a time, a technique called “bifilar winding” that ensures perfectly symmetrical



Transformers produced in ATI factory



AT2000 circuit board with heat sink

Heat Sinks

Because we design our amplifiers for the home as well as the rigorous demands of commercial applications, we use substantial heat sinks for each channel. This results in amplifiers that run absolutely quietly and as coolly as possible. The result: there is no noise to mar your listening experience and your amplifier operates more efficiently for a longer life. These over-size heat sinks eliminate the need for fans that add noise and introduce dust into the amplifier.

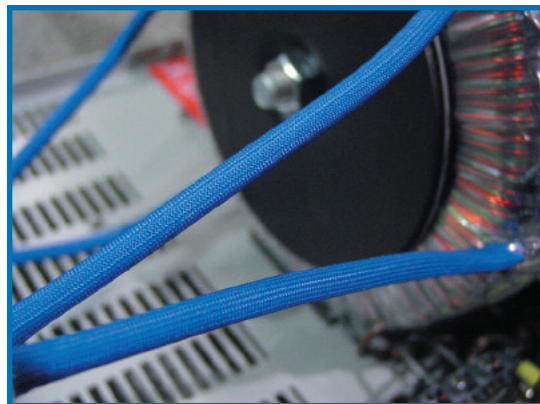
Circuit Boards

We use double-sided FR-4 glass epoxy circuit boards in all of our products. Not only does a double-sided board handle twice the electrical current that a single-sided board does, it produces much more solid connections to the components on the board. The solder joints that secure the components to the board cover both surfaces of the board, plus the inside of the hole into which the component leads are inserted. As a result, our circuit boards are practically perfect, with nearly zero failures due to bad connections or cold solder joints.

The components we use on our circuit boards also add to the quality of ATI products. All of the gain stages in our products employ high-quality metal-film resistors with 1-percent tolerances, to ensure that each and every circuit board functions exactly like the last.

Wiring

Open most multichannel power amplifiers and you will see a “rat’s nest”—dozens of wires running haphazardly through the chassis. Open up an ATI amplifier, though, and you will see a clean layout, with wires wrapped neatly in a fiberglass cloth tubing originally developed for the aerospace industry. The tubing protects the wire from both heat and accidental damage.



Fiberglass cloth tubing protects wires



Rear panel chassis-mount RCA jacks

Chassis-Mounted RCA Jacks

The gold-plated RCA input jacks on our amplifiers are mounted directly to the rear panel, instead of to a circuit board. While this technique complicates assembly, it results in a more robust connection, and the jack cannot be accidentally broken off by the tight-gripping RCA plugs used on many audiophile interconnect cables. In addition, our AT2000 and AT3000 Series power amplifiers use XLR-type connectors to make connections with the balanced audio output from a preamplifier such as our ATP8700 with balanced audio outputs.

Trouble-Free Circuit Breakers

Our higher power multi-channel amplifiers use magnetic circuit breakers to protect against AC overloads. If the breaker trips, it’s a simple matter to reset it. Most amplifiers, however, use fuses for overload protection; if a fuse blows, you must have the proper one available to restore power to your amplifier.

Protection Circuits

ATI amplifiers employ lightning-fast optically-coupled protection circuits that are completely removed from the signal path so they cannot affect the sound quality. These protection circuits are designed to detect electrical “shorts” in speakers or speaker wires and to sense electrical “spikes.” If triggered, the circuit will disengage the output. The protection circuit will sample the affected circuit every 10 seconds and will restore output automatically when safe to do so. This special feature minimizes the chance of your amplifier going out of service just when you’ve filled your home theater with expectant guests.



Amplifiers on the assembly line

State of the Art

ATP8700 A/V Processor & AT3000/AT2000 Series Pure Balance® Amplifiers



A truly state-of-the-art home theater system places extreme demands on surround sound processors and amplifiers. The combination of the ATP8700 and the AT3000 or the AT2000 provides every type of audio/video connection in common use while providing the “horsepower” to drive even the most difficult loudspeakers with ease. Breathtaking performance at its best!

ATP8700

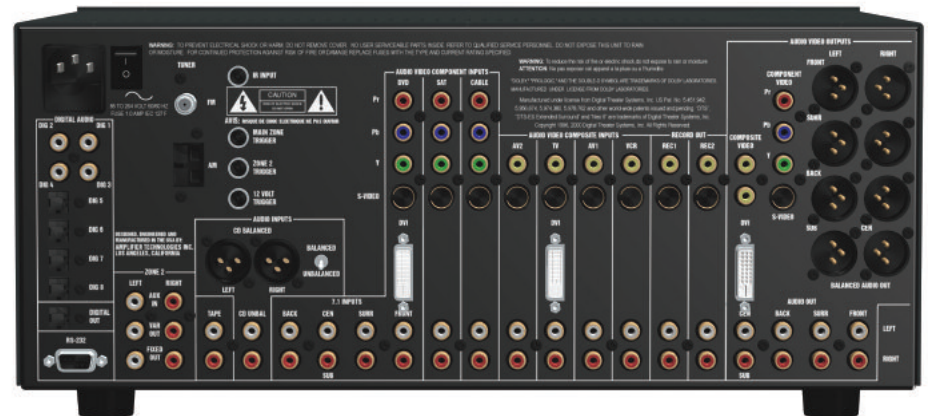
With new surround-sound technologies emerging almost monthly, an A/V processor must offer all the various flavors of Dolby® and DTS® and be able to upgrade as new technologies emerge. It must produce the sound quality of audiophile-grade digital components, and the convenience features demanded by custom installers.

In short, it must match the prodigious capabilities found in ATI's top-of-the-line A/V processor, the ATP8700.

While the ATP8700 offers all of the surround-sound technologies that high-end home theaters demand—Dolby Digital EX® and Pro Logic IIx® and DTS ES-Discrete®—it can also be upgraded as new technologies are developed.

Custom installers will love the ATP8700's control features. An RS-232 jack allows easy interfacing with control systems such as Crestron® and AMX® touchscreen remotes, and a second-zone output that lets you listen to or watch an audio or video source in another room. Three remote trigger outputs can be programmed to function only when specific inputs are selected, so you can trigger, say, a motorized screen to drop automatically when the DVD input is selected. The programmable, backlit remote controls not only the ATP8700, but every other device in your audio/video system.

By now, you must have noticed the ATP8700's most distinctive feature—a widescreen 7-inch front-panel video monitor. Not only does the monitor let you see images from composite and S-video sources, it also lets you use the ATP8700's onscreen setup menus even if you cannot see your TV. This screen proves especially convenient in custom installations where the ATP8700 is mounted in a separate equipment closet or room. Finally, the ATP8700 offers enough inputs for even the most complex home theater systems. They include 4 composite video inputs, 7 S-video inputs, three high-definition component video inputs, two DVI inputs, 10 analog and 8 digital audio inputs, and balanced XLR-type stereo analog audio inputs. The ATP8700 also features an AM/FM stereo tuner.

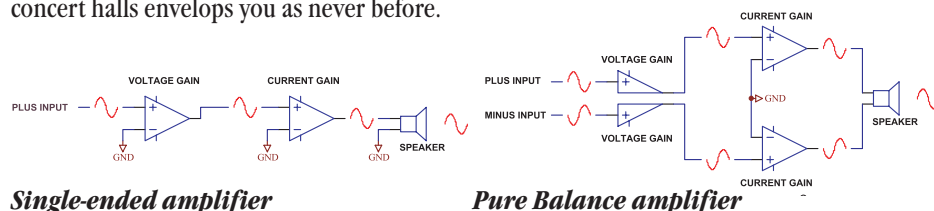


Back panel of the ATP8700

Any existing audio/video source—an HDTV satellite receiver, a progressive-scan DVD player, a DVD-Audio and/or SACD player—connects easily to the ATP8700. Balanced XLR-type outputs for every channel make it ideal for use with ATI's AT3000 and AT2000 Series Pure Balance® amplifiers.

AT3000/AT2000 Series

Engineers, reviewers, and home theater enthusiasts may often disagree, but when it comes to amplifiers, there is one fact on which they all find common ground: the best possible design is the fully differential balanced amplifier. A fully differential amplifier is basically two separate amplification circuits per channel. One circuit amplifies the positive half of the audio signal, while the other amplifies the negative half. The benefits of this design are tremendous. It automatically rejects any noise coming in from external sources, such as radio-frequency and electromagnetic interference. It eliminates hum and reduces distortion. It also doubles the slew rate (speed) of the amplifier, for better reproduction of high frequencies and better transient performance. We call this technology Pure Balance®, and we use it in two of our amplifier lines: the AT3000 and the AT2000 series. The result of Pure Balance technology is breathtaking. Acoustic instruments sound so natural and clear, you may think you're hearing a live performance. The rich ambience of concert halls envelops you as never before.



Single-ended amplifier

Pure Balance amplifier



Back panel of the AT2007 (the AT3007 has the same layout but is taller)



AT3000 Series power amplifier

Although some home theater amplifiers have balanced, XLR-type input connectors, most simply convert the balanced signal to unbalanced in the first amplification stage—and limit the benefits of a balanced connection in the process. Not Pure Balance amplifiers. Pure Balance amplifiers keep the signal balanced all the way from the XLR inputs to the speaker terminals.

With substantial power on tap—300 watts per channel for the AT3000 series, 200 watts per channel for the AT2000 series—both amplifiers have the muscle to power the largest home theater systems. In particular, the AT3000 series produces enough power even for capacious screening rooms. Both amplifiers are available in any two to seven channel models from the AT2002/AT3002 to the AT2007/AT3007. Because each amplifier channel resides on a separate, plug-in module, upgrades are easy. You can start with, say, five channels and add two more if you decide to move up to Dolby Digital EX®, DTS ES-Discrete® or other 6.1- and 7.1-channel surround-sound technologies.

We supply the AT3000 series with a power cord that fits only into a 20-amp electrical socket. This amplifier is so powerful it cannot reach peak output from a 15-amp circuit. The power cord is designed for 20-amp use, providing a more robust connection to the amplifier than a 15-amp cord can offer. The AT2000 series uses the same 20-amp connection at the amplifier end, but substitutes a 15-amp plug.

Listen to the AT3000 and AT2000 series amps. We think you'll agree that no other fully differential amplifiers in the world can beat their performance and power—or their price.

AT3000 Series
2 to 7 Channels
300 Watts/Ch
(8 Ohms)
450 Watts/Ch
(4 Ohms)

AT2000 Series
2 to 7 Channels
200 Watts/Ch
(8 Ohms)
300 Watts/Ch
(4 Ohms)

Uncompromising Performance

ATP7700 A/V Processor & AT1800 Series Power Amplifiers



Premium performance; unrelenting reliability; extraordinary experience. These are the hallmarks that define this very affordable high-end home theater system. Despite their modest prices, the ATP7700 and AT1800 offer surround sound technologies to suit any program material. The end result is a combination of components as technologically advanced as a luxury sedan, but as rugged and reliable as a classic pickup truck.

ATP7700

When we started building surround sound processors, we demanded more advanced features and up-to-the-minute technology. We wanted our processors to be every bit as durable and reliable as our power amplifiers. And they are.

Case in point: the ATP7700.

The ATP7700 offers surround-sound technologies to suit any program material, from VHS tape to multichannel SACD. It includes Dolby Digital EX® and Pro Logic IIx®, DTS ES-Discrete® and 7.1-channel inputs that accommodate DVD-Audio and SACD players. The 7.1-channel input includes bass management functions, so you can adjust the output of your DVD-A or

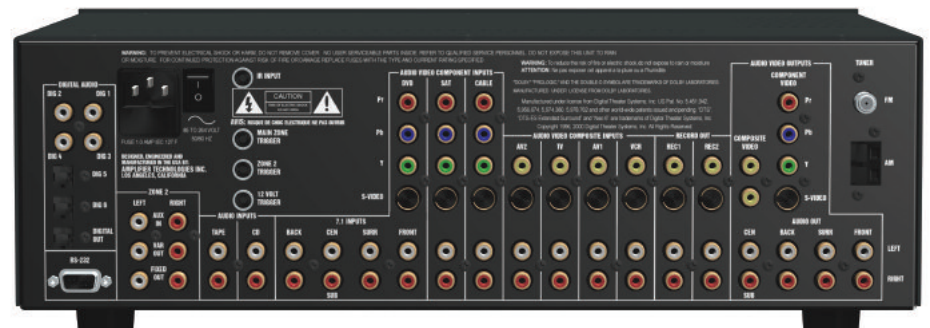
SACD player to suit your speaker system. Many processors with DVD-A/SACD inputs lack this feature—and as a result, often discard much of the bass in the recordings.

Custom installers and advanced do-it-yourselfers will appreciate the ATP7700's many convenience features. Most notable among these features is the large 5-inch (4:3) display TFT monitor that allows easy programming without the need to refer to on-screen viewing.

Then there's the learning remote that can control every component in your system. An RS-232 interface makes it easy to control the ATP7700 from advanced touchscreen controllers such as Crestron® and AMX®. A second-zone output permits the use of any video or audio source device in another room. Remote triggers let the ATP7700 control motorized screens, lighting, etc. Discrete on and off buttons make it easy to control the ATP7700 from a programmable remote. Buffered video outputs allow the ATP7700 to feed distant TVs through long video cables. And all of the ATP7700's setup parameters can be downloaded to a computer, making it easy for a home user to restore the settings, and for a custom installer to program multiple ATP7700 A/V processors.

The back panel includes four composite video and seven S-video inputs; three high-definition component video inputs, plus 10 analog and six digital audio inputs. There's also an AM/FM stereo tuner, a feature found in few high-end preamp/processors.

You can be forgiven for thinking that modern technology and old-fashioned reliability are mutually exclusive...but the ATP7700 proves that they can co-exist in the same product.



Back panel of the ATP7700

AT1800 Series

At 180 Watts RMS per channel, the AT1800 Series provides the best price to performance ratio of any amplifiers available. Sharing many of the same characteristics of its bigger brothers, the AT3000/AT2000 Series, this amplifier is capable of delivering the levels of power and high current performance found only in amplifiers costing thousands more.

The AT1800 series comprises six amplifier models, all identical except for the number of channels. The series starts with the two-channel AT1802, and finishes with the seven-channel AT1807. The amplifiers are modular; each channel resides on a separate, plug-in circuit board, so increasing the number of channels is easy.

Like all other ATI amplifiers, the AT1800-series amps are cooled by large heat sinks, not by cooling fans. This feature may be especially important in this amplifier, which is likely to find use in many home theater systems that do not hide the equipment in a rack or closet. You can set this amp right next to your favorite listening chair without having to worry about fan noise. An optically-coupled protection circuit automatically shuts down the amplifier in an overload situation, such as when someone accidentally cuts into a speaker cable and shorts out the amp. Once the protection circuit is engaged, it checks the conditions every 10 seconds, and restores output automatically when the overload situation is remedied. The protection circuit is optically coupled to the audio circuit; because there's no direct electrical connection, the protection doesn't affect sound quality. A magnetic circuit breaker provides further protection and eliminates the need for cumbersome fuses.



Back panel of the AT1807

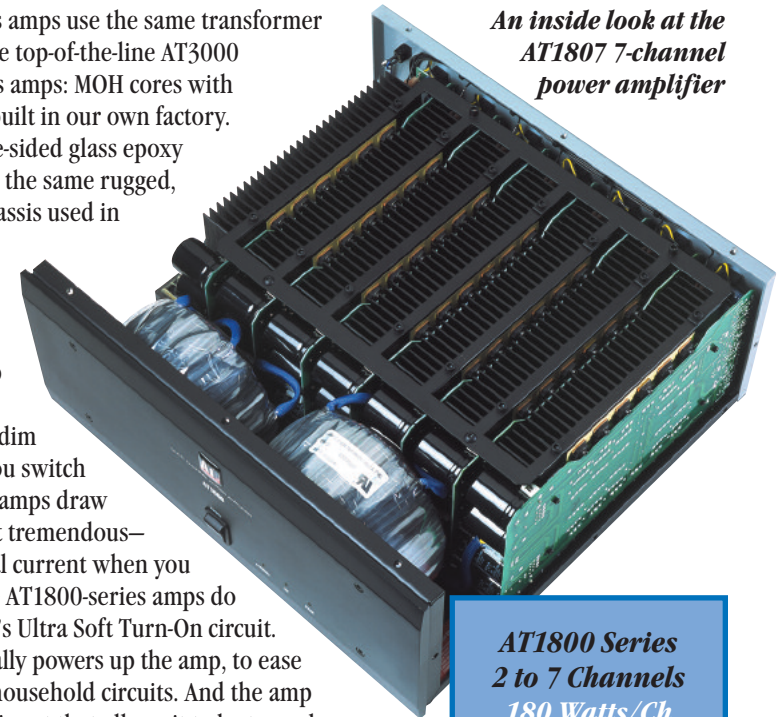


AT1800 Series power amplifier

The AT1800-series amps use the same transformer construction as the top-of-the-line AT3000 and AT2000 series amps: MOH cores with bifilar windings, built in our own factory. It also uses double-sided glass epoxy circuit boards and the same rugged, powder-coated chassis used in all our products.

Even the AT1807, with 1,260 total watts, will not trip your household circuit breaker or dim the lights when you switch it on. High power amps draw a momentary—but tremendous—rush of electrical current when you turn them on. The AT1800-series amps do not, thanks to ATI's Ultra Soft Turn-On circuit. This circuit gradually powers up the amp, to ease the load on your household circuits. And the amp includes a trigger input that allows it to be turned on and off.

For the best value in a basic home theater amplifier, nothing beats ATI's AT1800-series amps.

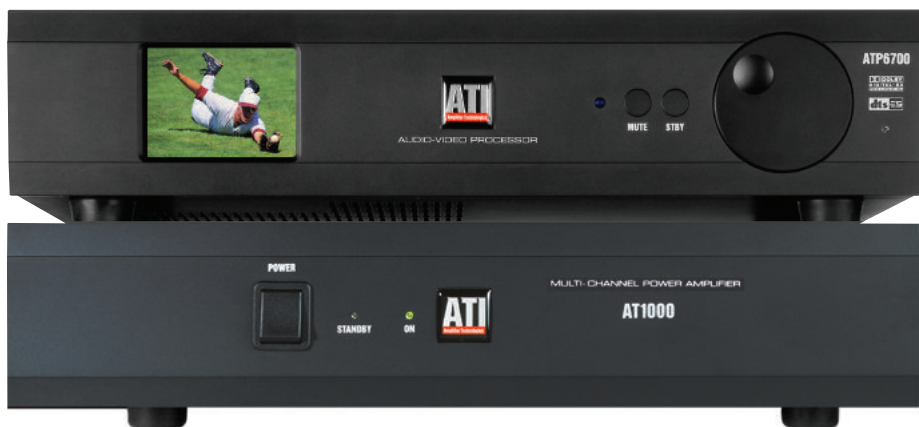


An inside look at the AT1807 7-channel power amplifier

AT1800 Series
2 to 7 Channels
180 Watts/Ch
(8 Ohms)
270 Watts/Ch
(4 Ohms)

Why Should You Settle for Just a Receiver?

ATP6700 A/V Processor & AT1000 Series Power Amplifier



Value-minded home theater enthusiasts usually purchase audio/video receivers to serve as the centerpiece of their systems. In the process, they sacrifice flexibility, sound quality and the ability to upgrade in the future. But with the ATP 6700/AT1000 combo there's no need to settle for a receiver. You'll have a stack that easily outperforms high-end receivers...at a comparable price.

ATP6700

Like the best receivers, the ATP6700 includes every important surround-sound technology: Dolby Digital EX[®] and Pro Logic IIx[®], DTS ES-Discrete[®] and 24/96. The DVD-A/SACD input even has bass management, with an adjustable crossover, so you can adapt the sound from the DVD-A/ SACD player to your speaker system and avoid losing bass as you would with many surround processors. The ATP6700 does not digitize the signals coming into the DVD-A/SACD input, either, so every bit of the amazing sound quality of these formats comes through.

Even dedicated home theater enthusiasts should find enough inputs and outputs on the ATP6700's back panel. It has five composite video inputs, seven S-video inputs, two high-definition component video inputs, six digital audio inputs and 10 analog audio inputs.

It comes with custom-installation-friendly convenience features, too. Its learning remote control can command not only the ATP6700, but every other device in your system, too. A second-zone output lets you enjoy an audio source in a second room. Trigger outputs let the ATP6700 control a motorized screen, room lighting and more. The backlit remote can be programmed to control all of the other devices in your audio/video system.



Even at the ATP6700's incredibly affordable price, it still comes with a durable, powder-coated chassis, 18-8 stainless-steel hardware, a detachable power cord and double-sided glass-epoxy circuit boards.

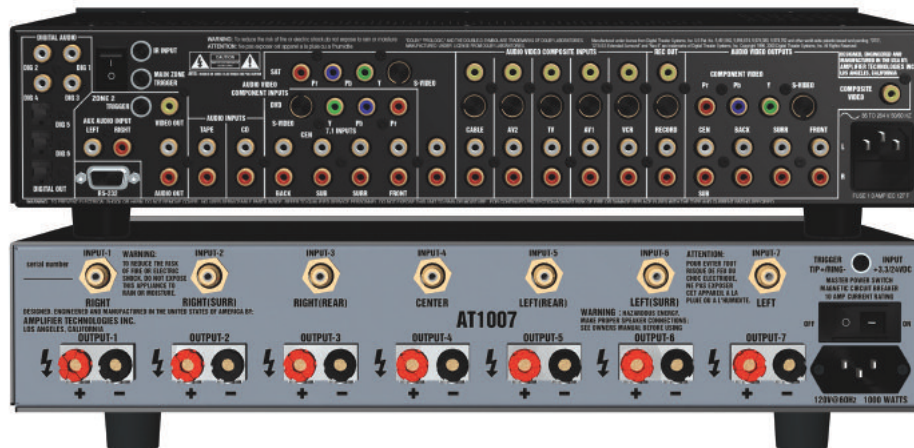
With the ATP6700 A/V processor, even budget-minded home theater enthusiasts need not compromise when it comes to sound. So kiss that receiver goodbye and say hello to state-of-the-art performance.

AT1000

This remarkable amplifier has the chassis of a compact with the heart of a lion. Don't let its size mislead you, it delivers a whopping 100 Watts RMS per channel with all channels operating at full output simultaneously! This is far more "punch" than you'll ever get out of any high-end receiver...power you can hear.

You may ask "what are the compromises from your other amplifiers?" The answer is easy: none. This little giant encompasses almost every feature of our other amplifiers including large toroidal transformers, glass epoxy circuit boards, optical protection circuitry, an ultra soft start circuit and a remote trigger.

AT1000
5 & 7 Channels
100 Watts/Ch
(8 Ohms)
150 Watts/Ch
(4 Ohms)



Back panels of the ATP6700 and AT1000

Features

ATI A/V Processors

Decoding Modes

Dolby: Digital 5.1, Digital EX, Pro Logic II Cinema, Pro Logic IIx Music, Pro Logic IIx Cinema.
DTS: DTS 5.1, DTS ES, Neo 6, 96/24.

TFT Monitors

Monitors are located on the front panels to display menus for initial setup and to facilitate changes in programming. The monitors are in addition to the on-screen displays of composite and S-Video connections.

AM/FM Tuners

Available on the ATP8700 and ATP7700. Twelve presets are available for both AM and FM.

7.1 Analog Bypass

For use with SACD or DVD analog media.

2nd Zone

This allows for second audio or same video signal in another location.

DVI Connection (ATP8700)

These high-bandwidth single-plug connectors facilitate connections to various types of monitors.

Balanced Outputs

Available on the ATP8700, these XLR type connectors support the use of the balanced connections available on the AT3000 and AT2000 series amplifiers.

RS232 Interface

This network-style connector enables the connection to various control system interfaces available from such companies as Crestron® and AMX®.

Triggers

These triggers can be configured to automatically turn on items such as power amplifiers, lower viewing screens or even operate drapes when the processor is turned on.

3-Year Warranty

All ATI A/V Processors are backed by a 3-year parts and labor warranty when purchased in accordance with our Warranty Policy.

ATI Power Amplifiers

Convection Cooling with Massive Heat Sinks

Many high power amplifiers use cooling fans that are not only loud, but also are dust collectors. ATI instead uses more costly specially extruded large heat sinks so you can place them anywhere in a room without having to worry about noise.

Huge Toroidal Transformers

The huge transformers used in ATI amplifiers employ MOH cores with bi-filar windings, which we manufacture in our own factory.

Remote Triggers

All ATI amplifiers feature a 12V trigger that allows them to interface with control systems so they can be turned on and off automatically, or from a remote control.

Optical Protection Circuit

This safety feature instantaneously disengages the amplifier's output in an overload or speaker short-circuit situation. If activated, this circuit will sample the condition every 10 seconds and restore output when the problem is cleared.

Ultra-Soft Turn-On

High power amplifiers draw a momentary-but tremendous- inrush of electrical current when you turn them on. This will not happen because of ATI's Ultra Soft Turn-On circuitry that gradually powers up the amp to ease the load on household circuits.

Low Distortion/Low Noise

The exact "nature" of sound is a matter of individual choice and environmental conditions, however distortion and noise are absolutely measurable in any situation. All ATI amps are at the "cutting edge" of the lowest distortion and noise possible.

Class-A-B Operation

While there are numerous classes of amplifier design, Class A-B consistently is the choice of audiophiles as well as the casual listener. This design offers the best transient response, lowest distortion and noise and cool operation—thus prolonging the life of the amp.

Upgradeability

The AT 3000 Series, AT 2000 Series and AT 1800 Series are available in configurations from 2 to 7 channels and are upgradeable at a modest cost, preventing costly obsolescence.

7-Year Warranty

All ATI amplifiers are backed by a 7-year parts and labor warranty when purchased in accordance with our Warranty Policy.

Two-Channel Amplifiers

For More Than Just Stereo

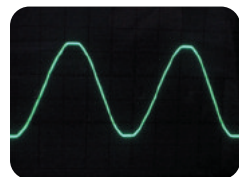
Two-channel amplifiers aren't just for stereo anymore. They're just as likely to find use powering the two back speakers in a 7.1-channel surround sound system or driving six ceiling speakers in a master bedroom suite. Nowadays, a two-channel amplifier must produce the sound quality demanded by audiophiles, handle the extreme dynamics of home theater and provide the reliability expected by custom installers. Few two-channel amps are designed to handle each of these tasks—but for the ATI AT1202 and AT602, it's all in a day's work.



AT1202
amplifier shown
with optional rack
adapter kit



Without clip limiter



*With Clip Limiter
At Same Level*

The AT1202 and AT602 are two-channel amplifiers (120 watts and 60 watts per channel, respectively) with all of the quality features built into ATI's big multichannel amplifiers, including ATI-built transformers with MOH cores and bifilar windings, double-sided circuit boards and massive heat sinks for quiet, reliable cooling. Both sound excellent in stereo applications. But both also include features designed to enhance their utility in custom-installed audio/video systems.

The AT1202 and AT602 include clip limiters, which prevent the amplifiers from producing significant clipping (distortion), no matter how high the volume is turned up. Distortion can destroy speakers and in-wall volume controls in seconds, but with the AT1202 and AT602, it is never a concern.



Back panels of the AT1202 & AT602



AT602
power amplifier

It's not always practical to have a separate amplifier driving each speaker in a multiroom audio system, so installers often use a single amp to drive multiple speakers. This arrangement presents a tremendous load that many amplifiers cannot drive, which is why we designed the AT1202 and AT602 specifically so that they can drive several pairs of speakers without strain. Their output stages remain stable and functioning even with the complex, challenging loads that multiple speakers usually present. When these amps encounter an overload situation, they conduct themselves with grace. An optically coupled protection circuit disengages the amp's output when it encounters an overload. The circuit checks the conditions every 10 seconds and restores output automatically when the overload is corrected, without the use of relays. Both amplifiers include a remote trigger feature, which is rare on stereo amps. The remote trigger allows other devices, such as surround-sound preamp/processors and multiroom audio controllers, to turn the AT1202 and AT602 on and off automatically.

You can stack 10 of these amps for a multiroom audio system without having to worry about tripping the house circuit breaker when they're turned on. ATI's Ultra Soft Turn-On circuit gradually powers up the amplifiers to reduce the current load. You won't even see the lights dim!

Whether you're powering a pair of exotic audiophile speakers or stringing together a yardful of outdoor speakers, the AT1202 and AT602 are up to the task.

AT1202
2 Channels
120 Watts/Ch
(8 Ohms)
180 Watts/Ch
(4 Ohms)

AT602
2 Channels
60 Watts/Ch
(8 Ohms)
90 Watts/Ch
(4 Ohms)

Stereo in Six Rooms

From One Amplifier

Sound anywhere in your home, at the touch of a button. It's always been the dream of the music lover. The AT6012 makes it a reality. And unlike any other amplifier, the AT6012 is designed to provide up to six rooms of sound with no additional multiroom audio electronics required.

The AT6012 includes connectors for external "up/down" momentary rocker switches, such as the Leviton® 5657-2E pictured here; these switches give you up/down volume control. Simple, three-wire Phoenix connectors give you stereo volume control in any room at exceptionally low cost. Because we use high-quality, motorized gain controls instead of inexpensive potentiometers, the AT6012 delivers sound quality far superior to that of typical wall-mounted volume controls. Add six up/down switches, a CD player and speakers, and you have a complete multiroom audio system with performance equal to or better than that of any multiroom system on the market.

With 60 watts per channel, and the same amplification circuits found in ATI's award-winning home theater amplifiers, the AT6012 packs enough power to drive nearly any speaker, and the sound quality to please even the most demanding professionals.

A multiroom amplifier must be especially reliable—it sees use practically every day, and is likely to be installed in an equipment rack that may make it difficult to service. The AT6012, like other ATI amps, is designed and built with a focus on reliability. Its optically coupled protection circuit disengages the output whenever an overload condition (shorted speaker terminals, for example) exists. It then checks the conditions every 10 seconds, restoring output only when the overload condition has been removed; without the use of relays.

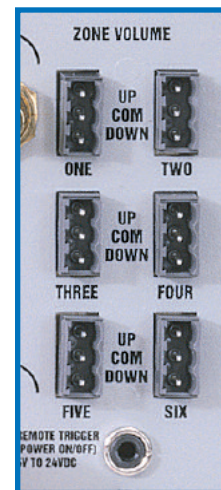


Back panel of the AT6012



*AT6012
power amplifier*

Closeup view of Phoenix connectors



A rocker switch controls volume in each room



When we designed the AT6012, we did not sacrifice functionality just to accommodate more channels. So we included all of the features that make ATI amps sound great and function dependably. The AT6012 uses transformers made from MOH cores with bifilar windings, double-sided glass epoxy circuit boards, and separate supply capacitors and power supply rectifiers for each of its 12 channels. Thanks to separate power supplies for each channel, you can crank up the sound for a party without diminishing sound quality in the other rooms.

A remote trigger allows such devices as a multiroom audio controller, a touchscreen remote control or a simple wall switch to turn the AT6012 on and off automatically.

With the dependability and sound quality of the AT6012, there's no reason to sacrifice performance for multiroom audio systems. Each and every room can enjoy the same sound quality you'd experience in an ATI-equipped home theater.

AT6012
12 Channels
60 Watts/Ch
(8 Ohms)
90 Watts/Ch
(4 Ohms)

Specifications

A/V Processors

| <i>Model</i> | <i>ATP8700</i> | <i>ATP7700</i> | <i>ATP6700</i> |
|---|---|---|--------------------------------|
| <i>Input Level</i> | 200mVrms | 200mVrms | 200mVrms |
| <i>Output Level (Preamp)</i> | 3.5 Vrms | 3.5 Vrms | 3.5 Vrms |
| <i>Input Impedance</i> | 15 k Ohms | 15 k Ohms | 15 k Ohms |
| <i>Total Harmonic Distortion (Stereo Source)</i> | < 0.03% | < 0.03% | < 0.03% |
| <i>Total Harmonic Distortion (7.1 Channel Source)</i> | 0.003% | 0.003% | 0.003% |
| <i>Frequency Response (Stereo Bypass Mode)</i> | 20Hz to 20kHz (±0.3 dB) | 20Hz to 20kHz (±0.3 dB) | 20Hz to 20kHz (±0.3 dB) |
| <i>Video Bandwidth (Composite and S Video)</i> | 200 mHz | 200 mHz | 200 mHz |
| <i>Video Bandwidth (Component)</i> | 270 mHz | 270 mHz | 270 mHz |
| <i>Stereo Analog Input Level</i> | 2 Vrms | 2 Vrms | 2 Vrms |
| <i>Signal-to-Noise Ratio</i> | 102 dB CCIR-ARM | 102 dB CCIR-ARM | 102 dB CCIR-ARM |
| <i>Digital Audio Inputs/Outputs</i> | 4 Coax, 4 Optical/1 Optical | 4 Coax, 2 Optical/1 Optical | 4 Coax, 2 Optical/1 Optical |
| <i>Analog Audio Inputs/Outputs</i> | 1 Pair Balanced, 9 RCA Pairs/4 RCA Pairs | 9 RCA Pairs/4 RCA Pairs | 9 RCA Pairs/2 RCA Pairs |
| <i>7.1-Channel Audio Inputs/Outputs</i> | 1Set RCA/1 Set Balanced, 1 Set RCA | 1 Set RCA/1 Set RCA | 1 Set RCA/1 Set RCA |
| <i>Video Inputs (Composite, S-Video, Component)</i> | 4, 7, 3 | 4, 7, 3 | 5, 7, 2 |
| <i>Video Outputs (Composite, S-Video, Component)</i> | 4, 1, 1 | 4, 1, 1 | 3, 2, 1 |
| <i>Second Zone Inputs/Outputs</i> | 1 Audio In/1 Variable & 1 Fixed Audio Out | 1 Audio In/1 Variable & 1 Fixed Audio Out | 1 Audio In/1 Audio & Video Out |
| <i>Triggers</i> | 1 Main Zone, 1 Zone 2, 1 12V, 1 IR | 1 Main Zone, 1 Zone 2, 1 12V, 1 IR | 1 Main Zone/1 Zone 2, 1 IR |
| <i>AM/FM Tuner</i> | Yes | Yes | No |
| <i>Voltage Automatic Setting</i> | 100 VAC to 240 VAC | 100 VAC to 240 VAC | 100 VAC to 240 VAC |
| <i>Power Consumption</i> | 50 W | 50 W | 50 W |
| <i>Chassis Dimensions (W x H x D) Inches</i> | 17 x 7 x 12.5 | 17 x 5.25 x 12.5 | 17 x 3.5 x 12.5 |
| <i>Chassis Dimensions (W x H x D) Millimeters</i> | 431.8 x 177.8 x 317.5 | 431.8 x 133.3 x 317.5 | 431.8 x 88.9 x 317.5 |
| <i>Net Weight (lbs/kg)</i> | 20/9.1 | 18/8.2 | 15/6.8 |
| <i>Shipping Weight (lbs/kg)</i> | 28/12.7 | 26/11.8 | 21/9.5 |

All Specifications refer to 1 Vrms and 0 dBf digital or 2 Vrms analog input, except when stated.

Specifications

Power Amplifiers

| <i>Model or Series</i> | <i>AT3000</i> | <i>AT2000</i> | <i>AT1800</i> | <i>AT1202</i> | <i>AT602</i> | <i>AT6012</i> |
|--|--|--------------------|--------------------|--|-------------------|-----------------|
| <i>Number of Channels</i> | 2 to 7 | 2 to 7 | 2 to 7 | 2 | 2 | 12 |
| <i>EIA 1kHz Output Power at 8 Ohms*</i> | 350 watts | 250 watts | 210 watts | 140 watts | 75 watts | 75 watts |
| <i>EIA 1kHz Output Power at 4 Ohms*</i> | 475 watts | 375 watts | 315 watts | 220 watts | 110 watts | 110 watts |
| <i>FTC Full Bandwidth Output Power at 8 Ohms**</i> | 300 watts | 200 watts | 180 watts | 120 watts | 60 watts | 60 watts |
| <i>FTC Full Bandwidth Output Power at 4 Ohms**</i> | 450 watts | 300 watts | 270 watts | 180 watts | 90 watts | 90 watts |
| <i>Input Sensitivity for Full Rated Power</i> | 1.8 Volts | 1.6 Volts | 1.6 Volts | 1.3 Volts | 0.9 Volts | 1.2 Volts |
| <i>Frequency Response</i> | ±0.1dB from 20Hz to 20kHz at 1 watt | | | | | |
| <i>Phase Response</i> | +5 to -15 degrees from 20Hz to 20kHz at 1 watt | | | | | |
| <i>Signal-to-Noise Ratio “A-Weighted”</i> | Greater than 120dB below rated FTC full bandwidth power | | | | | |
| <i>Total Harmonic Distortion (THD)</i> | Less than 0.03% at full rated FTC power from 20Hz to 20kHz | | | Less than 0.005% at full EIA power at 1kHz | | |
| <i>Intermodulation Distortion (IMD)</i> | Less than 0.03% from 250 milliwatts to full rated FTC power | | | | | |
| <i>Load Impedance</i> | Safe with all types of loads. Rated for 4 to 16 ohms | | | | | |
| <i>Power Bandwidth FTC</i> | +0-3db from 5Hz to 100kHz | | | | | |
| <i>Damping Factor/Crosstalk</i> | Greater than 400 from 10Hz to 400Hz/Greater than -100dB from 20Hz to 20kHz | | | | | |
| <i>Voltage Gain Through RCA Jacks</i> | 34dB | 34dB | 28dB | 28dB | 28dB | 28dB |
| <i>Voltage Gain Balanced Through XLR Jacks</i> | 28dB | 28dB | N/A | N/A | N/A | N/A |
| <i>Slew Rate Through RCA Jacks</i> | 50V/microsecond | 50V/microsecond | 50V/microsecond | 50V/microsecond | 50V/microsecond | 50V/microsecond |
| <i>Slew Rate Through XLR Jacks</i> | 70V/microsecond | 70V/microsecond | N/A | N/A | N/A | N/A |
| <i>Input Impedance</i> | Nominally 28k ohms | | | | | |
| <i>Power Requirements</i> | 120 VAC (other voltages available on export models) | | | | | |
| <i>Rack Panels/Rack Adapters</i> | Optional Panel | Optional Panel | Optional Panel | Optional Adapters | Optional Adapters | Optional Panel |
| <i>Chassis Dimensions (W x H x D) Inches</i> | 17 x 8.75 x 18.3 | 17 x 7 x 16.5 | 17 x 7 x 16.5 | 17 x 3.5 x 12 | 17 x 3.5 x 10.25 | 17 x 7 x 16 |
| <i>Chassis Dimensions (W x H x D) Millimeters</i> | 432 x 222 x 465 | 432 x 178 x 419 | 432 x 178 x 419 | 432 x 89 x 305 | 432 x 89 x 260 | 432 x 178 x 406 |
| <i>Net Weight (lbs/kg) Model Dependent</i> | 76-126/34.55-57.27 | 50-93/22.73-42.27 | 50-93/22.73-42.27 | 36/16.36 | 32/14.55 | 73/33.18 |
| <i>Shipping Weight (lbs/kg) Model Dependent</i> | 88-138/40-62.73 | 62-105/28.18-47.73 | 62-105/28.18-47.73 | 44/20 | 48/21.82 | 82/37.27 |

*EIA 1kHz Power refers to maximum average power in watts at 1kHz with 0.005% THD and noise. **FTC Full Bandwidth Power refers to maximum average power in watts from 20Hz to 20kHz with 0.03% THD and noise.

ATI Limited Warranty

Terms and Conditions

All ATI products are warranted against defects in materials and workmanship for 90 days from the date of purchase by the original owner. The date of purchase shall be established by the original owner presenting to the ATI Customer Service Facility the original owner's purchase receipt or sales slip showing from whom the product was purchased, the date of purchase and the purchase price of the unit.

In the event that proof of purchase cannot be established as stated in the preceding sentence, the warranty period shall commence on the date of manufacture, provided the serial number on the unit has not been altered in any manner.

During the warranty period, ATI will repair, or at its option, replace at no charge, components that prove to be defective provided the product is returned in accordance with the shipping instructions that are contained in the unit. The unit is to be sent PREPAID in the original carton and packing along with a detailed description of the problem to ATI in the event it needs factory servicing. ATI will return it prepaid to you upon completion of the service.

Optional Extended Warranty Program

The standard 90-Day Limited Warranty will be extended to a 3-Year Limited Warranty (on all A/V Processors) or a 7-Year Limited Warranty (on all Power Amplifiers) if the following conditions are met:

The ATI product is purchased from an authorized ATI reseller. The customer completes the registration card. The customer returns the completed registration card AND copy of original bill of sale to ATI within 14 days of purchase.

This extended warranty is transferable to subsequent purchasers as long as all Optional Extended Warranty conditions are met.

Transferability

The above warranties are transferable to subsequent owners as long as all the conditions are met under the Optional Extended Warranty Program. The warranty is not transferable if the unit(s) was originally purchased from an unauthorized seller.

The above warranties do not apply if the product has been damaged by accident or misuse or as a result of modification by other than the ATI factory service facility.

ATI shall not be held liable for incidental or consequential damages of any kind arising from the sale or use of its products. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THERE ARE NO WARRANTIES GIVEN BY ATI THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. ALL IMPLIED WARRANTIES OF FITNESS FOR PURPOSE SOLD, MERCHANTABILITY, DESCRIPTION, QUALITY PRODUCTIVENESS OR ANY OTHER MATTERS ARE LIMITED TO THE TERM OF THE EXPRESS WARRANTIES HEREIN STATED.

Some states do not allow limitations on how long an implied warranty may last, so the above limitation may not apply to you.

Obligation to Make Changes

Products are sold on the basis of specifications applicable at the time of sale. ATI shall have no obligation to modify or to update products once sold.

This warranty gives you specific rights and you may also have other rights that vary from state to state. This warranty is applicable only in the United States.

Warranty Outside the United States

ATI has formal distribution agreements in many countries. The ATI importer in those countries has assumed the responsibility for servicing ATI products. Please contact the dealer or distributor in the country where you purchased your product for service issues.



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